

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND WASHINGTON NAVY YARD 1322 PATTERSON AVENUE SE SUITE 1000 WASHINGTON DC 20374-5065

IN REPLY REFER TO

8 December 1999

From: Commander, Naval Facilities Engineering Command

Subj: NAVAL FACILITIES ENGINEERING COMMAND INTERIM POLICY GUIDANCE FOR CADD, GIS AND RELATED TECHNOLOGIES

Encl: (1) Interim Policy Guidance for CADD, GIS and Related Technologies

- 1. Enclosure (1) is forwarded for immediate compliance and implementation. As Chief Engineer and the NAVFAC proponent for base mapping and GIS development, my goal is to develop a strategy that will lead to a comprehensive SECNAV policy, coordinated with efforts of the other services. The Interim Policy Guidance developed during our 27-28 October policy development workshop is the first step in that process.
- 2. This guidance prescribes the goals, roles and responsibilities, and standards necessary to promote the use of CADD and GIS in order to improve the quality of geospatial and design data, enhance Naval decision-making, and maximize mission effectiveness. It also prescribes the standards for creation, collection, processing, maintenance, storage, distribution, and utilization of installation geospatial and design data throughout the Department of the Navy. This is necessary to comply with EO 12906 and other national and DOD guidance, and should serve as a vehicle to maximize the use of geospatial and design data, and interoperability of information systems. This guidance will reduce duplication of installation data creation, collection and software development, and enable the delivery of standardized products. Accordingly, it should be regarded as a vehicle to promote the life-cycle management of geospatial and design data in the areas of contract bidding and design discipline coordination, as well as serving as an enabling document for all NAVFAC technical guidelines pertaining to CADD and GIS.
- 3. Two URLs related to the policy are: http://navfacilitator.navfac.navy.mil/cheng (under "New Developments"), which provides access to the POA&M for post-workshop activities and the roadmap for policy development, and http://navfacilitator.navfac.navy.mil/cheng/workshop.htm which contains a CADD/GIS Working Group list that will eventually be transformed into a Knowledge Management Center of Expertise.

4. Your cooperation to implement this interim guidance is essential. If you have questions, please call the POC for this effort, Mr. Dick Bilden, at 202-685-9197, DSN 325-9197. Thank you for your support.

DR. GET W. MOY, P.E.

Chief Engineer, and Director,

Engineering and Base Development

Distribution: See next page Subj: NAVAL FACILITIES ENGINEERING COMMAND INTERIM POLICY GUIDANCE FOR CADD, GIS AND RELATED TECHNOLOGIES

Distribution:

COMPACNAVFACENGCOM

COMLANTNAVFACENGCOM

COMSOUTHWESTNAVFACENGCOM

CO SOUTHNAVFACENGCOM

CO NORTHNAVFACENGCOM

CO ENGFLDACT WEST

CO ENGFLDACT CHES

CO ENGFLDACT MW

CO ENGFLDACT NW

CO ENGFLDACT MED

CO PWC WASHINGTON

CO PWC PEARL HARBOR

CO PWC GREAT LAKES

CO PWC PENSACOLA

CO PWC NORFOLK

CO PWC SAN DIEGO

CO PWC JACKSONVILLE

CO PWC GUAM

CO PWC YOKOSUKA

SEABEE LOGISTICS CENTER

NFESC PH

NFESC EAST

NAVY CRANE CENTER

Copy to: Internal List 1

INTERIM POLICY GUIDANCE FOR CADD, GIS AND RELATED TECHNOLOGIES December 1999

PURPOSE

This document provides interim NAVFAC guidance for the utilization of CADD, GIS and related technologies pending the formal staffing of a comprehensive Navy policy that is currently being coordinated with our Army, Air Force and Marine Corps counterparts.

It is intended to accomplish the following:

- Prescribe the goals, roles and responsibilities, and standards necessary to promote the use of CADD, GIS and
 related technologies in order to improve the quality of geospatial and design data, enhance Naval decision-making,
 and maximize mission effectiveness.
- Prescribe standards for the creation, collection, processing, maintenance, storage, distribution, and utilization of
 installation geospatial and design data throughout the Department of the Navy necessary to comply with EO 12906
 and other national and DOD guidance.
- Maximize the use of geospatial and design data and interoperability of information systems; reduce duplication of
 installation data creation, collection and software development; and enable the delivery of standardized products
 and deliverables.
- Promote the life-cycle management of geospatial and design data in the areas of contract bidding and design discipline coordination
- Foster the incorporation of CADD deliverables into geospatial products through CADD/GIS Technology Center
 and related industry standards initiatives by serving as an enabling document for the NAVFAC technical guidelines
 pertaining to CADD and GIS.

GOALS

The following goals shall be adhered to in the utilization of CADD, GIS and related technologies:

- Recognize geospatial and design information resources as vital Naval mission assets warranting investment, management, and exploitation.
- Promote the use of CADD/GIS technology to enhance Naval decision-making and maximize mission effectiveness.
- Share knowledge, existing resources, data, applications and work practices to reduce duplication of efforts. Utilize the CADD/GIS Technology Center for Facilities, Infrastructure and Environment standards updating and revision.
- Minimize redundant application development costs by using COTS platforms and existing GOTS tools.
- Eliminate redundant data collection costs by ensuring past, current, and future geospatial and design investments are inventoried, managed and exploited in a shared forum.
- Provide a creative Architecture/Engineering/Construction environment that is both flexible and adaptable to meeting customer needs.
- Establish a skilled cadre of full-time personnel to develop, implement, and sustain long-term use of geospatial and design information resource investments to support the mission.
- Achieve a paperless design process.
- Promote and facilitate the integration and use of three-dimensional design and visualization geospatial products, including technologies that can simultaneously provide capabilities in both the imagery analysis and geospatial information domains
- Promote Electronic Document Interchange and other e-commerce benefits.
- Enable collaborative technology among all military components and other facility stakeholders.

Enclosure (1)

ROLES AND RESPONSIBILITIES

The following roles and responsibilities are essential to meeting the goals:

Headquarters NAVFAC – provide leadership, promote Navy-wide Awareness, set policy, develop guidance, recommend standards, encourage collaboration and partnering, act as Resource Proponent, act as Strategic Liaison with DoD and other Government agencies.

Regional Commander through the Regional Engineer or applicable facilities and public works support organization - coordinate data responsibilities; provide controlled "single storefront" enterprise-wide access to facilities, shore infrastructure, and environmental data; coordinate implementation and enforce standards and policies.

Activity through the Public Works organization – own and /maintain data; implement standards and policies. Geospatial information owners are responsible for maintaining, protecting, stewarding, and sharing their functional information assets.

EFD / EFA / PWC / ESC – provide support as service providers to activity and Regional Engineer; serve as subject matter experts and advisors in respective areas of expertise.

Architect/Engineer and Contractor – comply with standards and policy; provide constructive feedback; participate in US National standards initiatives

CIO - Provide technology and IT infrastructure standards.

ACQ - Provide acquisition guidance

STANDARDS AND GUIDANCE

The following standards and guidance pertaining to CADD, GIS and related technologies shall be used and followed:

Digital Geospatial Data. Digital geospatial data used for management of Department of the Navy facilities and land shall be acquired and managed in conformance with the latest version of the following standards and policies:

Tri-Service Spatial Data Standards developed by the CADD/GIS Technology Center. The standards are harmonized with and extend the Federal Geographic Data committee (FGDC) standards required by Executive Order 12906 of 11 April 1994, "Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure".

FGDC Content Standard for Digital Geospatial Metadata (CSDGM). This FGDC metadata standard shall be used to document Navy facilities and land geospatial data. The metadata shall be made electronically accessible to the National Spatial Data Clearinghouse by submission to the CADD/GIS Technology Center node of the Clearinghouse.

NAVFAC Guidelines for Installation Mapping and Geospatial Data, which is a companion document to the CADD/GIS Technology Center's Guidelines for Installation Mapping and Geospatial Data, shall be used for acquiring facilities, installation, and environmental mapping and geospatial data.

CADD Drawings and Data. CADD drawings and data used for the planning, design, construction, operations, maintenance and demolition of Department of the Navy facilities and installations shall be delivered in conformance with the latest version of the following standards and policies:

U. S. National CAD Standard (NCS)

CADD/GIS Technology Center AEC CADD Standard 1.8 (or above)

NAVFAC Field Component CADD Policy (where applicable and in conformance with NAVFACENGCOM policy)

NAVFACINST 4250.1, Electronic Bid Solicitation